



What's in the Inflation Reduction Act for the Solid Waste Industry?



There's been a lot of buzz around how the Inflation Reduction Act (IRA), intended to pump clean energy production and infrastructure and support other greenhouse gas reduction work, will impact the solid waste management industry.

[Arlene Karidis](#) | Dec 14, 2022

There's been a lot of buzz around how the Inflation Reduction Act (IRA), intended to pump clean energy production and infrastructure and support other greenhouse gas reduction work, will impact the solid waste management industry.

Signed into federal law in August 2022, the IRA will funnel just over \$369 billion into domestic energy security and varied climate change programs over the next 10 years.

Touted as the most significant climate legislation in U.S. history, it provides such incentives as a robust tax credit to purchase alternative, low-carbon fuels. It includes tax credits and or grants for landfill gas construction projects; to buy electric vehicles (EV) and hybrids, including Class 1-4 commercial trucks; to advance emissions-reducing biofuel technologies across several transportation sectors; and for carbon sequestration projects.

The bill also establishes a National Green Bank to kickstart private funding, particularly for initiatives prioritizing zero-emissions and renewable energy technologies to improve environmental and health conditions in low-income and minority communities.

Waste360 spoke to professionals across multiple disciplines and segments within waste management who get down to the nitty gritty on what the IRA could mean for who—and on specific bill provisions to pay close attention to.

Starting with a look at biogas, technology and project developers will realize three major impacts, projects Patrick Serfass, executive director of the American Biogas Council: 1) longer-term certainty of credit to help attract investors; 2) a new credit to address a sector that didn't have a credit before; and 3) the carbon sequestration credit will become more relevant to biogas systems.

“Prior to the IRA, our industry only benefited from one- to two-year extensions of a tax credit that only served one sector of the biogas industry. Biogas producers have been working to attract investment for projects that take years to build and competing with other industries with long-term tax credits, so this was not a long-term solution. For the first time, developers and financiers have certainty and a competitive edge that will fuel growth of the biogas and clean energy industries for years to come,” Serfass says.

Moving on to the second new advantage he calls out, now biogas projects producing renewable natural gas (RNG) and renewable heat can benefit from credits similar to those available for some time to developers of wind, solar, and fuel cells technologies.

Finally, the IRA changed the minimum qualification for carbon sequestration. It now recognizes the carbon reduction benefits of medium-sized landfills (as well as farms and wastewater plants), when previously only the largest sites could participate.

On the anaerobic digestion (AD) side, digesters that recycle 100,000 tons per year or more also qualify for the credit if their CO₂ is captured and beneficially used.

“We're still waiting for guidance from the Treasury Department and other federal agencies to access funding in the bill. However, it's clear that the IRA has sent a strong signal to investors who have ramped up purchases of biogas systems and acquisitions of biogas companies because they see even greater opportunity in this sector than a few months ago,” Serfass says.

He views the policy as a means to help the U.S. gain traction in a space where other regions lead.

“While the private sector has and will continue to advance the renewable energy market, if we are to scale at the rate needed to combat climate change, state and federal policies must be implemented to advance technologies like RNG and biogas electricity to address food and animal waste in a sustainable, economical way,” he says.

Among provisions relevant to AD, biogas/RNG, and hydrogen are the expanded Investment and Production Tax Credits (ITC/PTC). The ITC offers qualified biogas/RNG facilities up to a 50 percent tax credit, based on total project capital costs. While the Clean Fuel PTC is allocated as a per-gallon equivalent credit, based on lifecycle carbon intensity.

For operators exploring landfill gas and renewable fuel projects, Michael E. Hoffman, global head of industrial research for Stifel, has this insight: “The IRA’s language [around these projects] suggests they can do well to partner with developers and leverage those partners’ money rather than go it alone.

“The way the credit structure is set up, you would put less capital in and still get credit because you control the gas,” he explains.

How the EV credit could play out is yet to be determined, he believes. Currently, heavy-duty trucks are not produced at a volume to have meaningful impact on capital spending and thus for the credit (about \$40,000 on a \$700,000-plus truck) to have much immediate benefit. Charging infrastructure lags too. With these considerations, outside counsel and tax authorities are assessing how much the heavy-weight world could benefit from this incentive.

Solid waste pros, particularly landfill operators, should stay on top of the carbon sequestration incentive, Hoffman says. Disposal sites typically flare about half of their landfill gas, ultimately generating a tremendous amount of CO₂.

But the question is, does your site lend itself to deep well injection (DWI), the primary method by which operators would capture that CO₂? DWI requires a certain subsurface geology, including a thick reservoir to store the CO₂ and an impermeable cap rock(s) to keep the gas contained, among necessary site-specific parameters.

While there’s no quick answer as to how these projects would pencil out with the credit, Hoffman says, “There’s no doubt that engineering departments of waste companies and consulting firms are looking at this. Everyone who owns a landfill should explore whether carbon sequestration would be a feasible option.”

The Direct Pay provisions (related to the ITC) may be a game-changer for public sector-sponsored projects, believes Steve Simmons, president of Gershman, Brickner & Bratton (GBB).

“Federal tax credits produced by renewable energy projects typically have little relevance to local governments, because they do not pay federal income taxes. With the Direct Pay option, tax-exempt public entities may receive the value of the tax credit in a direct payment from the Internal Revenue Service, effectively serving as a grant equal to 30 percent or more of the capital investment required to build a facility,” he says.

GBB has public-sector clients evaluating AD projects for which the IRA tax credits could provide tens-of-millions of dollars in support, anticipated to lower tipping fees significantly. On the private side, the firm has clients who expect to qualify for millions of dollars of tax credits for similar project types. Some of them are slated to start construction in early 2023, according to Simmons.

While the IRA contains no provisions specific to composting, Frank Franciosi, executive director-US Composting Council, anticipates opportunity for the industry. Key he says is that grants are structured so private sector entities, with public sector or alone, can tap into these programs for carbon sequestration and economic development.

“We see opportunity to increase capacity by leveraging the technical and marketing expertise of the private sector with existing infrastructure of municipal operations,” he says.

The scale and scope of the IRA compared to previous policies or incentives is unprecedented, says Matt Tomich, president of Energy Vision.

Especially compelling, he figures, is that many aspects of the bill can be ‘stacked’ on top of existing programs, namely the EPA's Renewable Fuel Standard and California's Low-Carbon Fuel Standard.

“And the fact that the IRA directs Treasury and other federal agencies to implement a technology-neutral approach rooted in lifecycle carbon accounting is exactly the right approach to smart climate policy that rewards projects with meaningful and measurable greenhouse gas reduction benefits,” Tomich says.